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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,865	03/23/2004	Lars Ingvarsson	HT-114	2690
7590	12/10/2007			
Mark P. Stone 4th Floor 25 Third Street Stamford, CT 06905			EXAMINER CRANE, DANIEL C	
			ART UNIT 3725	PAPER NUMBER
			MAIL DATE 12/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

CT

Office Action Summary	Application No.	Applicant(s)	
	10/806,865	INGVARSSON, LARS	
	Examiner	Art Unit	
	Daniel C. Crane	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 is/are allowed.
- 6) ☒ Claim(s) 10-12 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 13, 14 and 19-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

REJECTION OF CLAIMS OVER PRIOR ART

Claims 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Spath (5,253,501). Applicant's attention is directed to Figures 2 and 13-15 where the pair of rollers 20 and 21 is provided for each upstanding side of the metal sheet 11. Figures 13-15 and the disclosure at column 8, lines 13-68, and column 9, lines 1-26, where the rolling force 63 and 64 and 74 is varied along the length of the upstanding side of the metal sheet 11 so as to cause thinning of the upstanding side. It is clearly evident that this thinning is a result of an angular deviation between the axes of the cooperating, opposed rollers 20 and 21.

Claims 11, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spath (5,253,501) in view of Izumi (JP 59-27723). Spath does not show that the rolling devices 20 and 21 can be moved towards and away from one another. This feature is well known in the art as evidenced by Izumi where the rolling devices 5a, 6a and 5b, 6b can be moved relative one another so as to vary the distance between the rolling devices and work on metal sheet of differing widths. Accordingly, it would have been obvious tot the skilled artisan at the time of the invention to have modified Spath's rolling devices 20, 21 by varying the distance between one another using the features taught by Izumi for the above noted motivation.

Claims 10-12 are further rejected under 35 U.S.C. 102(b) as being anticipated by Utashiro (3,355,922). See Figure 1 where the roller devices 11, 16 and 10, 15 can be angularly adjusted relative to one another and the rolling force can be adjusted by adjustment screws in the columns 2 and 3 (see the sentence bridging columns 2 and 3). As to claim 11, the rollers can be

adjusted along the “frame” 4 and 5 by replacement of the cylinders 7, 8, 12 or 22. Since the rollers 15 and 16 pivot freely, their movement is in a sideways direction. Thus, the limitation of claim 12 is met by Utashiro’s roll forming machine. Since the apparatus has the capability of thinning the upstanding sides of the metal sheet by virtue of metal sheet having a thickness greater than the gap between the rollers, the claimed apparatus is met by Utashiro

Claims 16-18 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Utashiro (3,355,922) in view of Izumi (JP 59-27723). The use of ball screws is well known in the art as adjusting implements that provide precise adjustment and prevent backlash. Accordingly, it would have been obvious to the skilled artisan at the time of the invention to have modified Utashiro’ relatively, vertically, adjustable shafts 4 and 5 on columns (guides) 2 and 3 by using a ball screw assembly using the *concepts* taught by Izumi where a ball screw 10 can be used in the rolling art as an adjustment implement for the above noted motivation. As to claim 17, it would have been obvious to have used ball screws to adjust the width of the rollers as taught by Izumi rather than Utashiro's replacement cylinders 7, 8, 12 or 22 so as to vary the width in a simpler manner.

RESPONSE TO APPLICANT’S COMMENTS

Applicant takes issue with the applicability of the Utashiro teaching by arguing that Utashiro employs the rollers to only bend the metal sheet. Applicant maintains that the claimed invention differs from Utashiro because applicant's rollers thin the upstanding side causing the profile to bend. While this is true, it is noted that Utashiro’s apparatus has the capability of

thinning portions of the profile that can result in a bending of the profile. Given that the profile being fed through the rolling devices is of a thickness greater than the gap between the rollers, Utashiro's rolling devices will cause thinning of the upstanding sides of the metal sheet. If the prior art shows the claimed structural features, then the claims are met by the prior art. How the claimed apparatus may be used with metal sheet does not impart any structurally distinct features to the claimed subject matter.

Accordingly, it is maintained that the prior art meets the claimed subject matter.

INDICATION OF ALLOWABLE SUBJECT MATTER

Claims 13, 14, 19 and 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims because the prior art of record does not show the claimed features *inter alia* having ball screws controlled by motors for adjusting the angle between the axes of the rollers and for adjusting the rolling force of the rollers.

Claim 15 is allowed.

FINAL OFFICE ACTION

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

INQUIRIES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner D. Crane whose telephone number is **(571) 272-4516**. The examiner's office hours are 7:00AM-3:30PM, Monday through Friday.


Documents related to the instant application may be submitted by facsimile transmission at all times to Fax number **(571) 273-8300**. Applicant(s) is(are) reminded to clearly mark any transmission as "DRAFT" if it is not to be considered as an official response. The Examiner's Fax number is **(571) 273-4516**.

Application/Control Number:
10/806,865
Art Unit: 3725

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DCCrane
December 6, 2007



Daniel C. Crane
Primary Patent Examiner
Group Art Unit 3725